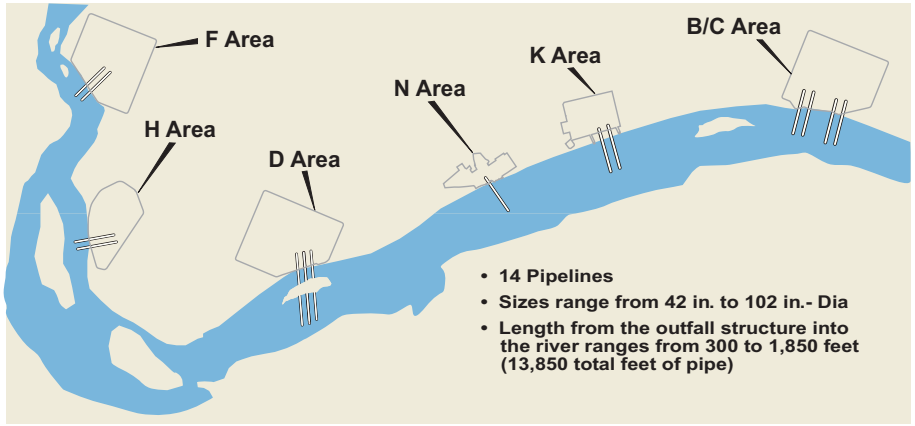
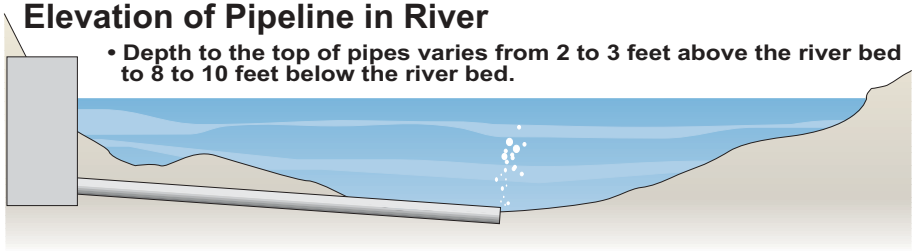
# Hanford 100 Areas

# River Pipeline End State Alternatives

## Leave in Place



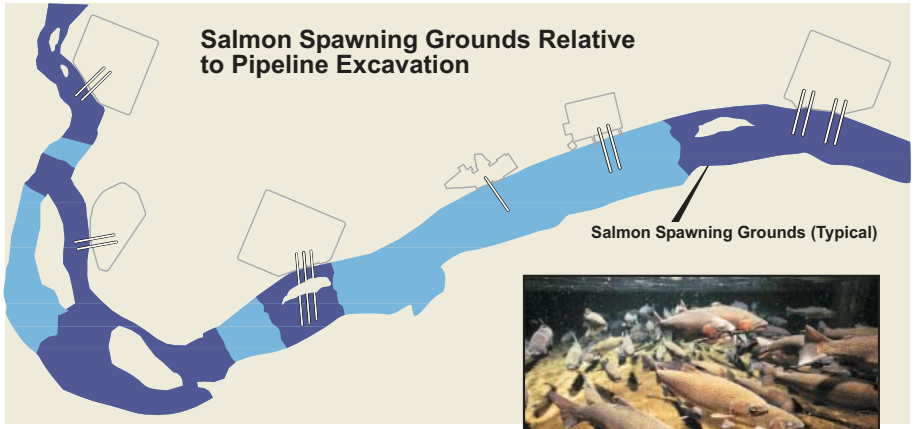

### Elevation of Pipeline in River




### Issues Related to Leaving in Place:

- Radionuclides and metals from the pipelines provide no risk to humans at the present time. Concentrations of chromium and mercury in the scale and sludge within the pipeline is thought to be insoluble and would pose minimal risk to the occasional fish.
- Deterioration of the piping might lead to sections being extensively uncovered, becoming weakened by the river currents, moving out of position, and eventually breaking off.
- Broken pieces of piping could become a navigational hazard for boaters, and could potentially be swept downstream and cause property damage to bridges, pilings and river pumps.
- Measurements taken in three places indicated deterioration of the wall thickness varied from 0.385 to 0.480 in. Original thickness was 0.5 in.
- At the current rate of corrosion, it will take approximately 100 years to completely deteriorate.
- The pipeline structures themselves may present the greatest environmental risk by creating a preferred habitat for undesirable fish that prey on young salmon.

## Remove




### Obstacles to Overcome

- **Worker risk**
- **Environmental damage from excavation**
- **Destruction of salmon spawning grounds**
- **Low net benefit with regard to reduction of risk**

### *Decision Driver...*

- ***C-16-06B Submit an Engineering Evaluation of the Final Disposition of the River Pipelines and Outfall Structures to EPA and Ecology***

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